

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 June 2004 (17.06.2004)

PCT

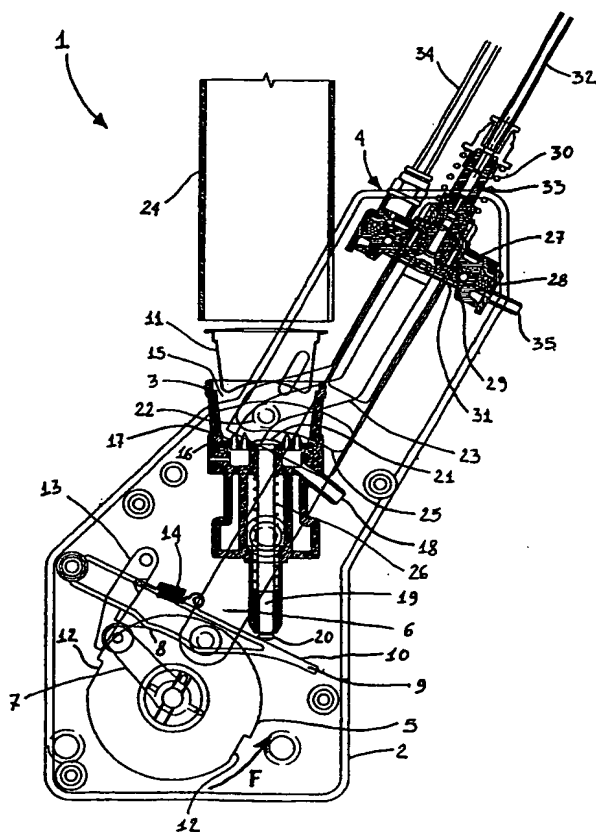
(10) International Publication Number
WO 2004/049878 A1

- (51) International Patent Classification⁷: **A47J 31/40**
- (21) International Application Number:
PCT/EP2003/012681
- (22) International Filing Date:
13 November 2003 (13.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
PN20022A000093
2 December 2002 (02.12.2002) IT
- (72) Inventor; and
(75) Inventor/Applicant (for US only): **MAGNO, Alessandro**
[IT/IT]; Via 4 Novembre 75, I-24030 Brembate Sopra (IT).
- (74) Agent: **GIUGNI, Valter**; Propria S.r.l., Via Mazzini, 13,
I-33170 Pordenone (IT).
- (81) Designated States (national): JP, US.
- (84) Designated States (regional): European patent (AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).
- Published:
— with international search report

(71) Applicant (for all designated States except US): **NECTA
VENDING SOLUTIONS S.p.A.** [IT/IT]; Via Roma 24,
IT-24030 Valbrembo, Bergamo (IT).

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **MECHANICALLY AND HYDRODYNAMICALLY OPERATED BREWING UNIT**



(57) **Abstract:** The invention relates to a mechanically and hy-
drodynamically operated brewing unit (1) for automatic bever-
age vending machines, comprising a rotatable base (3) provided
with a compartment (15) that acts as a brewing chamber, means
to let water under pressure into said compartment, means to con-
nect said compartment with the point at which the brewed bever-
age is dispensed, and a brewing head (4). This brewing head is
comprised of a hollow containment structure (279, a first hollow
piston (28) that is housed in said containment structure movably
relative thereto, a second piston (29) that is accommodated in
said first piston movably relative thereto, and elastic means (30)
contrasting the movement of said second piston. The brewing
unit is characterized in that said first piston and said second pis-
ton are operated by the direct action of a fluid under pressure.